From: Anisa Divine
Sent: Tuesday, March 22, 2005 6:50 PM
To: Dabbs, Paul
Cc: Lisa Beutler; Sumi, David; Michael Wade
Subject: Bulletin 160 Glossary

Dear Paul,

Below are my comments for entries for letters A through C. I am distressed that I had this many comments for these few entries. Have these entries been reviewed by the Bulletin 160 editors?

Please consider the following:

- **adjudication** – A case that has been heard and decided by a judge. In the context of an adjudicated groundwater basin, landowners or other parties have turned to the courts to settle disputes over how much groundwater can be extracted by each party to the decision. A**djudication** is not a case that has been decided -- it is either the act of deciding or the decision: Webster's New World Dictionary: 1) the act of adjudicating (judging or deciding by law), or 2) a judge's decision: b a decree in bankruptcy determining the status of the bankrupt.

- Include an entry for **agricultural drainage** -- the amount of water required to flush salts from to soil to sustain agricultural productivity in an arid climate such as California's. Without drainage agricultural land becomes saline & unproductive (or specifically mention drainage as part of consumptive use and/or duty of water).

- **agriculture water reliability (average)** – A measure of that system's ability to sustain the social, environmental, and economic systems that it serves during a year of average participation. It would be good to include the word agriculture somewhere in this definition. Also, I am not clear what system is being indicated -- the water system or the ag system.

- **agricultural water use efficiency** – Methods or technologies resulting in the same beneficial agricultural uses with less water or increased beneficial uses from existing water quantities. *Context: Scenario Factor, Water Management Strategy.* **Just about everything is wrong with this definition.** Ag water use efficiency is the ratio of applied water to required water for sustainable agriculture production. Thus, efficiency can be increased through the application of less water to achieve the same beneficial productivity or by achieving more productivity with the same use. Ag water use efficiency is not a method nor is it a technology. By using methods and technologies, ag water use efficiency might be increased (or decreased - depending on the skill of the user, the quality of the water, climate conditions, and on and on...)

- **allocation of long-term contractual imports** – Interregional allocation of water through mechanisms such as the State and federal water projects. *Context: Scenario Factor.* How about long-term inter-district transfers such as the IID/MWD transfer agreement and the QSA? Also, please provide the specific Scenario Factor as done with ag water use efficiency (see above).

- **applied water –** The amount of water from any source needed to meet the demand of the user.

- **applied water reductions** – A reduction in the amount of water diverted for agricultural applications; can include both real water and reused ag water. Context: *Benefit of AG water use efficiency and RDI* Definition for applied water is for any source & any user (see above). Definition, as written, for applied water reductions applies only to agriculture. DO not do this. Could be rewritten as something like: A reduction in the amount of water diverted from any source to meet a reduced demand of the user, and in the case of agricultural diversions, can include both real water and reused ag water. NOTE 1: un-reused ag water might be some downstream user's real water) NOTE 2: definition for new water uses "surplus water," a term that is not included as in the glossary

- **average year water demand** – Demand for water under average hydrologic conditions for a defined level of development. I think specific would be better than defined, i.e., for a specific level of development.

- **Central Valley project deliveries** – The volume of water imported to a given study area from the Central Valley Project. *Context: Scenario Factor.* The word project should be capitalized, i.e., Central Valley Project deliveries

- **CIMIS** – California Irrigation Management Information System. It is a network of standardized weather stations scattered throughout California, which report weather data on an hourly basis. More importantly, the weather stations use this data to calculate ETo, which is a reference point for evaporative demand for that microregion. These stations are not scattered, they are located.

- **climate change** – The impacts associated with changes in average annual temperature and precipitation and their monthly patterns in 2050 compared to today. *Context: Scenario Factor.* Climate change is not the impacts. Climate change is the change …., which is expected to have associated impacts.

- **Colorado River supply** – The average annual volume of water imported to California from the Colorado River. *Context: Scenario Factor.* Colorado River supply is not an average annual volume. It is a contracted amount under the Law of the River. 4.4 MAFY + 50% of any declared surplus, with specified amounts going to various agencies in the South Coast and Colorado River regions of California

- **consumptive use** - Include a note cautioning that there are legal as well as physical definitions - e.g., for the Imperial Valley, CVWD, and MWD - under the law of the river, all water diverted from the Colorado River is counted by the USBR as consumptive use (except for a small amount of return flow credit from the AAC)..

- **crop coefficient** – A crop coefficient (normally identified as Kp or Kc) is merely a numerical factor that relates the ET of the individual crop (ETc) to pan evaporation Also often related the ET of the crop to that of a reference crop (ETo), usually alfalfa. ALSO remove the word "merely."

- **crop unit water use** – Changes in the volume of water used per acre of cropped area due to changes in crop type. This can be a function of evapotranspiration rates and cultural practices, but NOT use efficiency. Ag use efficiency is captured under its own distinct factor. *Context: Scenario Factor.* I think of crop unit water use at the volume of water used per acre for a specific crop. There would be a change in crop unit water use if a different crop used a different amount of water. This definition seem unconventional.

Anisa

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